

hope to find undisturbed evidence of the events occurring in the immediately antecedent period; and such seem to be the bones and stalagmite formed before the introduction of the diluvian mud in the Kirkdale cave.

The author then proceeds to take a general view of the operations successively going on in this cave, founded upon his previous minute descriptions of its contents; of its earliest period when it was an unoccupied aperture; of its second period, when tenanted by hyænas, during which, as well as the former, stalagmite and stalactite were forming, though necessarily interrupted by the ingress and egress of its lodgers; of the third period, when the animals were extirpated and the mud introduced, and which appears therefore to have been that of the deluge; and of the fourth and last period, during which the superficial stalagmite incrusting the mud was formed, and in which no creature appears to have entered the cave till it was opened last summer, and no other process to have been going on than the uninterrupted formation of stalactite.

The strata of diluvial sediment seem to mark the point of time at which the latter state of things began, and the former ceased; and the limited quantity of postdiluvian stalactite, no less than the undecayed condition of the bones, tends to show that the time elapsed since the introduction of the mud has not been of excessive length.

Professor Buckland concludes this paper with an application of the arguments arising out of the detail of facts which it contains, to the illustration of other similar phenomena, where the evidence of their origin is less complete; of these, five are in our own country, and the author avails himself of their history, together with that of the Kirkdale cave, to elucidate the account of analogous caverns, which have been more or less perfectly examined in various parts of the Continent of Europe.

*Communication of a curious Appearance lately observed upon the Moon. By the Rev. Fearon Fallows. In a Letter addressed to John Barrow, Esq. F.R.S. Read February 28, 1822. [Phil. Trans. 1822, p. 237.]*

On the evening of the preceding 28th November, Mr. Fallows observed a luminous spot on the dark part of the moon's limb, which, by aid of a four-feet achromatic telescope, of a power of 100, seemed like a star of the sixth magnitude; three others much smaller were also remarked, but want of proper instruments prevented Mr. Fallows from ascertaining their situation. On the 29th, the large spot was as brilliant as on the preceding evening, the other two nearly invisible, and the third and most brilliant of the small spots had disappeared. On the 30th, the weather prevented further observations.